3.0. DESCRIPTION OF SERVICES/SCOPE OF WORK

3.1 Background: Air Force - Distributed Common Ground System (AF-DCGS) is a network-centric, Intelligence Surveillance and Reconnaissance (ISR) global enterprise designated as the Air Force AN/GSQ-272 SENTINEL Weapon System (WS) tasked with producing, via a Planning and Direction, Collection, Processing/Exploitation, Analysis and Production (PCPAD) process, actionable, decision-quality information in accordance with established priorities as approved by the Secretary of Defense. AF DCGS's products must be usable information which are immediately and simultaneously available to both engaged forces and intelligence analysts. AF DCGS takes advantage of Air Force, other DoD, national and coalition sensors in the air, on land, in space, and at sea spanning multiple intelligence (multi-INT) sources and provides tailored, correlated information to those who need it in the formats, timelines, and channels they need it, at all levels across the globe in peace and in wartime. It is scalable and comprised of fixed and deployable total force components capable of forward-based activities and robust, full-scale reach back operations. AF DCGS is a component of the larger DoD DCGS Family of Systems (FoS).

This contract will provide engineering technical services and support with a focus on the developing, prototyping, and testing a concept to enable rapid integration of Open Architecture (OA) pilot capabilities into the global AF DCGS enterprise. OSA is a critical piece of the DCGS future state, as it will encourage competition which will enable more innovation, lower procurement and O&M costs, and decrease cycle times. Results from this effort will prove a concept to reduce time and/or cost to mission capability for upgrade or modification, demilitarization and disposal of systems, components and services in a consistent, efficient and effective manner. Support includes technical analysis for trade studies, multi-INT capability assessments, lab test and evaluation, field test demonstrations, system performance tracking and documentation, vendor market surveys, supportability technical data development and training, transition planning and implementation in support of moving toward a flexible Open System Architecture environment. Support will include development of workflow solutions to ensure a sustainable ISR system and enterprise service management infrastructure involving a variety of classified and unclassified system data sources for the AF DCGS system architecture. This includes development and assessment of improved processes as well as technical innovations such as displaying operational system and support data for end-users, support providers and Government stakeholders.

The Government expects the Contractor to provide the Program Management Office with a highly capable team that is familiar with C2ISR and AF DCGS systems and services, is proactive and will produce innovative approaches that enable effective and efficient task execution.

Key tools in use by the AF DCGS enterprise include C2ISR tools related to Processing, Exploitation and Dissemination (PED) of data from multiple intelligence sources. The infrastructure is hosted on both Windows and Linux server based systems.

Developing and prototyping source code is within this scope of work. Prospective offerors should be aware that the successful contractor will not be developing and / or prototyping hardware. However, software shall be developed with an understanding of how it will impact the hardware and systems with which it is to be integrated.

The System Integration lab at Robins allows for developing and prototyping code for the Mission Applications. This facility can be utilized for this effort as required.

This scope of work does not include personal services. Any contract resulting from this scope of work shall not be a personal services contract.

3.2 Scope and Tasks:

- 3.2.1 Program / Contract Management: The Contractor shall provide program management support under this Task Order. This includes the management and oversight of all activities performed by Contractor personnel, including Sub-Contractors, to satisfy the requirements identified in this Performance Work Statement (PWS). The Contractor shall identify a Program Manager (PM) who shall provide management, direction, administration, quality assurance, and leadership of the execution of this task order. The PM need not be a Project Management Institute (PMI) certified Project Management Professional. However, the Program Manager must possess the requisite skills to perform traditional Program Manager type duties, to include the development of and adherence to a competent Program Management Plan. It is not required that the duty location for the Program Manager (PM) be located on-base for day-to-day execution of the contract.
 - 3.2.1.1 Orientation Briefing: The Contractor shall schedule and coordinate a Project Kick-Off Meeting within 30 days of task order award at a location approved by Government. The meeting will provide an introduction between the Contractor personnel and Government personnel who will be involved with the task order. The meeting will provide the opportunity to discuss technical, management, and security issues, travel authorization, gain approval for program reporting

formats and procedures. At a minimum, the attendees shall include contractor Key Personnel, relevant Government personnel, and Contracting Officer's Representative (COR).

- 3.2.1.2 Monthly Status Report: The Contractor Program Manager shall provide a Monthly Status Report (MSR) that summarizes project and task progress, associated risks, issues with mitigation plan or corrective action status. The Contractor shall deliver the MSR by the 5th of each month via electronic mail to the COR.
- 3.2.1.3 Program Management Review (PMR): The Contractor Program Manager will attend scheduled PMRs as notified by the Government. PMRs will be held at least annually. If appropriate, the Government will attempt to conduct PMRs via teleconference to mitigate travel costs. PMRs will cover performance status and feedback on milestone progress, risks and issues, and financial reporting.
- 3.2.1.4 Trip Reports: All Contractor travel shall be preapproved by the COR or designated representative. The Government will identify the need for a Trip Report (if required) when the request for travel is submitted. Trip reports will capture an accurate accounting of the Government approved and funded trip.
- 3.2.1.5 Technical Performance Meetings (TPM): The Contractor shall participate in technical performance meetings (TPMs) as necessary in the performance of any task. The content of the meeting can include the discussion of any information that has impact upon task activities, including documentation contents or format.
- 3.2.2 Engineering and Technical Analysis Support: The Contractor shall provide engineering and technical enterprise service support to include, but not limited to, the preparation of feasibility studies, analysis of alternatives, provision of technical services during the construction or installation phase, inspection and evaluation of engineering projects, and related services. The Contractor shall make use of relevant DoD and AF guidance and Instructions during the execution of these tasks.

3.2.2.1 **Sustaining Engineering:** The Contractor shall provide engineering services that involve but are not limited to system and technical in-service design, infrastructure (life cycle refresh, addition, modification) and retirement), communications, physical and logical components of services, and supporting software to improve reliability, maintainability, and affordability. Support will involve, but are not limited to, production and implementation of technical service management models and appropriate AF documentation, support to technical review process standards and adaptation (e.g. AF Form 1067), and the implementation of prototype agile delivery models to rapidly modernize or update the global AF DCGS enterprise system. Contractor efforts will promote collaborative interaction between the System Program Office, operational sites, other contractors, service providers and Mission Partners. In doing so the Contractor shall utilize a consistent and time sensitive approach to the supportability design of mission essential services that are effective and efficient, adhere to DoD and AF requirements and consider industry best practices. Contractors must apply the following: AF DCGS OA Management Plan, AF DCGS Master Standards List, AF DCGS Agile Center of Excellence, AF DCGS Risk Management; AF DCGS ACAT LEVEL 3 Life Cycle Sustainment Plan (LCSP) Version 1.0, AF DCGS Blue Baseline and OTB (Own The Baseline), Intelligence Community Directive (ICD) 503, and Security Impact Analysis.

3.2.2.2 Change Management and Release Management:

The Contractor shall provide engineering services that involve but are not limited to the necessary planning and coordination to take a new or changed service, or a service to be decommissioned, through Change Management and Release Management and into the production environment. Contractors must apply the following: Serena Business Manager, AF DCGS Blue Baseline, Configuration Management Plan (CMP) for the C2ISR Division.

AF DCGS Release Management and Deployment Process Definition, and AF DCGS Release Management and Deployment Procedures 3.2.2.3 **Integration environment support:** The Contractor shall provide engineering services that involve but are not limited to engineering Subject Matter Expert (SME) support for the AF DCGS integration environments. Provide SME support to ensure day-to-day process and system infrastructure operations. Root Cause Analysis (RCA) to eliminate recurring incidents and to minimize the impact of incidents that cannot be prevented. Problem Management includes the activities required to diagnose the root cause of incidents, determining the resolution to those problems and providing workarounds. Contractors must be familiar with the following: SENSORS and Multi-INT ACAT sustaining engineering; AF DCGS SAFe implementation, Continuous Integration processes and techniques, ICD 503, and AF DCGS Integrated Test Center (ITC) policy and practices.

It is important to note that experience and certifications related to the SAFe Agile process, while relevant to this scope of work, are not required of prospective offerors. The Government anticipates that the DCGS Program Office will provide the successful offeror with guidance relevant to the DCGS implementation of SAFe Agile.

DESIRED OUTCOME – Mission effective ART engineering and technical support within a continuous integration environment and meeting established process quality performance measures.

Architecture: The Contractor shall develop 3.2.2.4 recommendations for the future architecture that includes coordinated modernization and execution of AF DCGS architecture and integration tasks in close association with DoD and IC Mission Partners. The architecture recommendations must enable implementation of industry standard architecture practices, as directed by the Government. The contractor shall support update of operational and system views, maintain standards lists and facilitate integration of architecture initiatives across DoD and in close collaboration with IC Mission Partners. Contractors must be familiar with the following: DODAF version 2.02, Model Based System Engineering (MBSE).

3.2.2.5 Studies, Analysis and Assessments: The Contractor shall provide engineering services to develop an efficient and effective methodology for assessing and evaluating technology solutions during the life cycle of the AF-DCGS enterprise system. These services involve, but are not limited to, assessments and evaluations in support of the AF DCGS enterprise. In doing so, the contractor shall create a model or models for evaluating and selecting relevant technology solutions. Models will include the framework for developing and implementing the selected solutions into the architecture, as directed by the Government. Contractors must be familiar with the following: Systems Engineering Assessment Team (SEAT) processes, AF DCGS LCSP and templates that include Limited Sources Justification and Approval (J&A), Quality Assurance Surveillance Plan (QASP) Template, Market Research Report, Market Research for Warranty, Justification for an Exception to Fair Opportunity or to Use Brand-Name Restriction, Business Rules, Build of Materials (BOM) and HBG Asset request Form template.

3.2.2.6 Process Improvement and Transition Planning: The Contractor shall provide quality assurance for technical services

- 3.2.2.6.1 Innovative processes and procedures to ensure system operation is optimally effective, efficient and affordable. supportable operational capability. Plans shall fully evaluate areas such as enterprise asset management and licensing considerations, how and when various levels of validated Government requirements would be met.
- 3.2.2.6.2 Transition plans that identify how an initial prototype or pilot demonstrations could rapidly evolve to full system functionality and a supportable operational capability. Plans shall fully evaluate areas such as enterprise asset management and licensing considerations, how and when various levels of validated Government requirements would be met.
- **3.2.2.6.3** Engineering or technical services to correct or improve system issues with the goal of maintaining the required effective operations

and maintenance performance of the weapon system, or to provide direct support to the weapons system that is essential to production, sustainment, integration, interoperability, and configuration management.

- **3.2.2.7 Test Engineering:** The Contractor shall provide full system life-cycle test engineering capability support for both traditional AF DCGS multi-INT and automated test integration.
 - **3.2.2.7.1** AF DCGS expertise in traditional, Scrum and scaled agile software development techniques, automated test processes in transition to a continuous integration environment.
 - 3.2.2.7.2 The Contractor shall coordinate training in best practices, perform operational and developmental tests and evaluation, verification testing with new/modernized automated test software applications, support TEMs and participate in quick reaction teams for time critical failure analysis and mishap investigation activities; coordinate risk assessment activities, mitigation and corrective action plans.

 Contractors must be familiar with the following: DCGS-STP-TEMP-0001-AF DCGS TEMP; and AIR FORCE MANUAL 63-119.
- 3.2.3 Likely Schedule of Activities: The Government anticipates that the contractor shall be called upon to perform the work described in this section in support of multiple events and activities, including but not limited to:

• FY 19

- 7-8 DCGS Stack Installations
- 8-9 Multi-INT Correlation and Fusion fielding events
- 5 SR fielding events
- 4 Operational Utility Evaluations (OUEs)
- Migration of SR Apps to OA
- Issues related to continued operation of the legacy DCGS system

FY 20

- 3-4 DCGS Stack Installations
- 4 SR fielding events
- 2 Hub-based Full Motion Video (FMV) events

- 4 Operational Utility Evaluations (OUEs)
- Issues related to continued operation of the legacy DCGS system

• FY 21

- 4 Multi-INT Correlation and Fusion fielding events
- 1 SR fielding event
- 4 Operational Utility Evaluations (OUEs)
- Completion of OA fielding
- Issues related to continued operation of the legacy DCGS system

3.2.4 Anticipated Level of Effort: In the performance of the work described above, the DCGS Program Office anticipates the following level of effort:

| Commercial Labor Category | # of FTEs | # of Hours Base Year CLIN 1 |
|---------------------------------------|-----------|--------------------------------|
| SME Business and Financial Operations | | |
| Specialist Group 2 - | 0.1 | 186.0 |
| Management Analysts | | |
| Senior - Engineer Group 4 - | 1 | 1,860.0 |
| Electronic Engineers | | , |
| Senior Operations | 4 | 7,440.0 |
| Research Analyst | • | 7,7.1010 |
| Senior - Engineer Group 4 - | | |
| Engineers all Others Not | 6 | 11,160.0 |
| Listed Separately | | |
| Junior Manager Group 2 - | | |
| Architectural and | 9 | 16,740.0 |
| Engineering Manager | | |
| Senior - Engineer Group 4 - | | |
| Engineers all Others Not | 13 | 24,180.0 |
| Listed Separately | | |

All proposed personnel must hold a Top Secret security clearance, with eligibility to be "read in" to an SCI program.

During the course of contract performance, the Program Office requires the contractor to provide the Government with two (2) weeks' notice of the impending departure of any employee. The contractor must then replace the departing employee with a qualified individual within two weeks following any departure. All replacement personnel Top Secret security clearance, with eligibility to be "read in" to an SCI program upon being hired.

4.0. DELIVERY AND PERFORMANCE INFORMATION

Deliverables: All Deliverable shall be submitted to the Government Technical

Manager and the Contracting Officer Representative, with a transmittal letter to the Contracting Officer.

| Deliverable ID# | Title | Frequency | Description |
|-----------------|---------------------------------|--------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 4.1 | Orientation Briefing | Once – within 30 business days after contract award | Contractor will provide an orientation briefing |
| 4.2 | Monthly Status Report (MSR) | Monthly – within 5 business days after end of month | Contractor will provide a monthly status report with progress against tasks; upcoming activities or milestones of interest; risks and mitigation plan status; issues and corrective action status; proposed work plan modifications for consideration. |
| 4.3 | Program Management Review | As specified by Government | Contractor will provide a program management review with milestone progress, risks and issues, and financial reporting |
| 4.4 | Trip Reports | Per trip | The Contractor will provide a summary of all TDY travel, to include, dates of travel, location of travel, persons traveling, purpose of travel, accomplishments and discussion items, results, and action items. |
| 4.5 | Technical Reports | As required and directed by government per task | The Contractor shall provide, at the direction of government, technical reports in the execution of a task. Reports shall be accurate, clear, concise, and satisfy the requirements of the task. |
| 4.6 | Documentation | As required and directed by government per task | The Contractor shall provide, at the guidance of government, documentation in the execution of a task. Reports shall be accurate, clear, concise, and satisfy the requirements of the task. |
| 4.7 | Reports | As required and directed by government per task | The Contractor shall provide a transition plan to support the migration of capabilities to organic sources. |
| 4.8 | Reports | Once – within 90 business days after contract award | The Contractor shall provide a quality plan to outline the process and procedures used to ensure the development and delivery of quality products to the government. |
| 4.9 | Reports | As required and directed by government per task | The Contractor shall provide studies based on direction from the government for areas within the scope of this contract. |

| 4.10 | Program Management Plan (PMP) | Draft due at contract kick-off, with finalized PMP due 60 days after contract award. PMP shall be updated as necessary throughout the | At a high level, this document is a combination of a program charter and management plan. It provides an overview of the program, authorizes work, assigns authority, and documents how the program will be executed and managed. |
|------|-------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| | | _ | |
| | | term of the | |
| | | contract. | |

Ramp-up Period: Work under this Statement of Work may require a ramp-up period at the initial start of the period of performance for the Contractor to recruit and hire personnel. The ramp-up period specifics shall be identified in the Contractor's proposal